**Varicella (VAR) Vaccine**

**Precautions and Contraindications**

Screen all patients for precautions and contraindications to immunization.

**Recommended Schedule**

Varicella vaccine can be given to individuals 12 months of age and older:

* **All children <13 years of age should be administered routinely two doses of varicella-containing vaccine,** with the first dose administered at age 12 through 15 months and the second dose at age 4 through 6 years (i.e., before a child enters kindergarten or first grade).
	+ The second dose can be administered before age 4 years provided at least 3 months have elapsed since the first dose.
	+ 3 months. However, if the second dose was administered at least 4 weeks after the first dose, the second dose can be accepted as valid.
* **A second dose catch-up varicella vaccination is recommended for children, adolescents, and adults who previously had received one dose,** to improve individual protection against varicella and for more rapid impact on school outbreaks. Catch-up vaccination can be implemented during routine health care provider visits and through school and college entry requirements. Catch-up second dose can be administered at any interval longer than one month after the first dose.
* **Two doses of single-antigen varicella vaccine are recommended for adolescents (aged 13 years through 18 years) and adults (aged 19 years and older) without evidence of immunity to varicella** or a second dose if they have received only one dose**.** For persons aged 13 years and older, the minimum interval between doses is 4 weeks.
	+ Evidence of immunity to varicella in adolescents and adults includes any of the following (see *MMWR* 2007;56[No. RR-4], available at <http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf>):
		- Written documentation of 2 doses of varicella vaccine at least 4 weeks apart;
		- U.S.-born before 1980 (although for health-care personnel and pregnant women, birth before 1980 should not be considered evidence of immunity);
		- History of varicella based on diagnosis or verification of varicella by a health-care provider (for a patient reporting a history of or having an atypical case, a mild case, or both, health-care providers should seek either an epidemiologic link to a typical varicella case or to a laboratory-confirmed case or evidence of laboratory confirmation, if it was performed at the time of acute disease);
		- History of herpes zoster based on diagnosis or verification of herpes zoster by a health-care provider; or
		- Laboratory evidence of immunity or laboratory confirmation of disease.
* **Two doses of single-antigen varicella vaccine are recommended for healthcare personnel (aged 13 years and older) without evidence of immunity to varicella** or a second dose if they have received only one dose**.** For persons aged 13 years and older, the minimum interval between doses is 4 weeks.
	+ Healthcare Personnel evidence of immunity to varicella includes any of the following**:**
		- Written documentation of 2 doses of varicella vaccine at least 4 weeks apart,
		- Diagnosis or verification of a history of varicella disease by a health-care provider, or
		- Diagnosis or verification of a history of herpes zoster by a health-care provider.
		- Laboratory evidence of immunity or laboratory confirmation of the disease (commercial assays can be used to assess disease-induced immunity, but they often lack sensitivity to detect vaccine-induced immunity, i.e., they might yield false-negative results).

**Confirmation of Laboratory Evidence of Immunity after Documented Immunization with Two Doses of Varicella Vaccine**

* For new employees in Local Health Departments, it is not necessary to confirm laboratory evidence of immunity to varicella if an individual has written documentation of two doses of varicella vaccine at least 4 weeks apart.
* For existing employees in Local Health Department, it is not necessary to periodically (e.g., every five years) confirm laboratory evidence of immunity to varicella if an individual has written documentation of 2 doses of varicella vaccine at least 4 weeks apart.
* For other individuals, it is not necessary to confirm laboratory evidence of immunity to varicella if an individual has written documentation of two doses of varicella vaccine at least 4 weeks apart.

**Dosage and Route**

* 0.5 mL subcutaneously (SQ or SC)

**Anatomical Site**

* Outer aspect of the deltoid of the upper arm or in the higher anterolateral area of the thigh.

**Precautions**

* Prior to administering the vaccine, obtain a vaccination history to determine any reactions to any vaccine.
* For those of childbearing age, pregnancy should be avoided for 3 months following vaccination.

**Contraindications**

**DO NOT** administer varicella vaccine to individuals with:

* A history of anaphylactic reactions to neomycin.
* A history of hypersensitivity to gelatin or any other component of the vaccine.
* Blood dyscrasia, leukemia, lymphomas of any type, malignant neoplasms
* Primary and acquired immunodeficiency states, including AIDS
* Active untreated tuberculosis
* Women who are pregnant
* An active febrile illness with fever > 101.3°F.
* Immunosuppressive therapy including high-dose systemic corticosteroids.

**Adverse Events**

* See the product’s package insert
* See Adverse Events Following Vaccinations page of this section

**Tuberculin Testing and Live Vaccines**

Recommendations for use of the tuberculin skin test are independent of those for immunization. Tuberculin testing at any age is not required before administration of live-virus vaccines. A tuberculin skin test (TST) can be applied at the same visit during which these vaccines are administered. Measles vaccine temporarily can suppress tuberculin reactivity for at least 4 to 6 weeks. The effect of live-virus varicella, yellow fever, and live-attenuated influenza vaccines on tuberculin skin test reactivity is not known. In the absence of data, the same TST spacing recommendation should be applied to these vaccines as described for MMR. There is no evidence that inactivated vaccines, polysaccharide vaccines or recombinant or subunit vaccines or toxoids interfere with immune response to TST.

**Tuberculin Skin Testing (TST) and Varicella (VAR)**

* Apply TST at same visit as VAR (preferred strategy)
* Apply TST first and administer VAR when TST is read (least favored option because receipt of VAR is delayed) (least preferred strategy)
* Delay TST at least 4 weeks if VAR is given first.

**Storage and Handling**

* Store all live vaccines (MMR, MMRV, and varicella) in the freezer at 5°F, and protect from light, keep in original box with top closed.
* Reconstituted varicella vaccine, must be discarded, if not used within 30 minutes.

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